

the 1983 population sample from Red Mountain, while notably broad-leaved, includes some individuals that are indistinguishable from typical *G. bisetata* both in habit and in leaf shape.

Gray described the upper two pairs of stem leaves of *G. setigera* as forming an involucre to the solitary terminal flower. The 1983 collections from Red Mountain show this to be a variable trait, however; most plants have only the uppermost leaf-pair subtending the flower—as is typical of *G. bisetata*. The variation in form of the appendages of the corolla sinuses is identical in *G. bisetata* and *G. setigera*, both as described by Gray from the Bolander type and as noted in the 1983 samples from Red Mountain. We observed that the flowers of many plants on Red Mountain were paler blue than those in the Illinois Valley area, especially on the outer surface of the corolla.

Those gentians from northwestern California and adjacent Oregon, to which the name *G. setigera* has been misapplied, differ from the plants described above in having strictly erect or ascending stems, a poorly developed basal rosette, broad cauline leaves nearly alike (except the lowest 2–3 pairs) and at equally spaced nodes up the stem, often several flowers at the apex, and corolla sinuses often with more numerous capillary appendages. Further study may show these plants to be distinct from the closely related *G. calycosa* Grisebach and worthy of species status.

The Red Mountain population of *G. setigera* (= *G. bisetata*) is about 225 km south of the nearest sites in Del Norte Co. and southwestern Oregon. It occurs in a wet meadow on a serpentine ridge at ca. 1065 m elevation. As presently understood, this species is rare in California, and due to the misuse of its name for a different taxon, its listing in the “Inventory of Rare and Endangered Vascular Plants of California” (Smith and Berg, CNPS Spec. Publ. No. 1, 4th ed., 58, 1988) should be reevaluated. In Oregon *G. setigera* is threatened by prospective nickel mining, although due to economic considerations it seems unlikely that extraction and smelting of nickel ore will occur in the near future. The nomenclatural change from *G. bisetata* to *G. setigera* has little effect on the biological status of the species, as only a single widely disjunct population in California is being added to its previously known occurrences.

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INFRA-SPECIFIC NAME CHANGES IN *LIMNANTHES* (LIMNANTHACEAE).—In anticipation of a new edition of Jepson’s “Manual of the Flowering Plants of California”, it is necessary to make certain nomenclatural changes to provide uniformity throughout the genus *Limnanthes*.

The International Code (Voss, 1983, Regnum Veg. 111) provides no definitions for the taxa, subspecies and variety, and accordingly no distinction is made other than sequence if both are used.

At the time of my *Limnanthes* monograph (Mason, 1952, Univ. Calif. Publ. Bot. 25:455–512) I chose variety as the rank for the infraspecific taxa. In 1973 Arroyo (Brittonia 25:177–191) described several new taxa which she called subspecies. These appear to be taxonomically the same as my varieties. The following changes are made to elevate the several varieties to subspecies, and thereby standardize the taxonomy.

***Limnanthes douglasii* R. Br. subsp. *sulphurea* (C. Mason) C. Mason, stat. nov.**—*Limnanthes douglasii* var. *sulphurea* C. Mason, Univ. Calif. Publ. Bot. 25:477. 1952.

***Limnanthes douglasii* R. Br. subsp. *nivea* (C. Mason) C. Mason, stat. nov.**—*Limnanthes douglasii* var. *nivea* C. Mason, Univ. Calif. Publ. Bot. 25:477. 1952.

***Limnanthes douglasii* R. Br. subsp. *rosea* (Benth.) C. Mason, stat. nov.**—*Limnanthes rosea* Benth., Pl. Hartw. 302. 1848.

**Limnanthes gracilis** Howell subsp. *parishii* (Jepson) C. Mason, stat. nov.—*Limnanthes versicolor* (E. Greene) Rydb. var. *parishii* Jepson, Fl. Calif. 2:411. 1936.  
**Limnanthes alba** Hartweg in Benth. subsp. **versicolor** (E. Greene) C. Mason, stat. nov.—*Floerkea versicolor* E. Greene, Erythea 3:62. 1895.

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REAPPRAISAL OF THE RANGE OF *PHACELIA VALLICOLA* (HYDROPHYLLACEAE).—Discovery of disjunct populations of *Phacelia vallicola* Congdon ex Brand (Hydrophyllaceae) in Nevada and Sierra cos., California, inspired a search of major California herbaria for more information on the plant's distribution and habitat requirements. Until now *P. vallicola* was known from the W side of the Sierra Nevada in Mariposa, Tuolumne, Placer, and El Dorado cos. (Lee, Noteworthy collections, Madroño 30: 129, 1983). The collections listed below from Butte, Madera, Nevada, Shasta, and Sierra cos. extend the known range more than 200 km (Fig. 1).

*Specimens examined.* CA, Butte Co., overlook on the Skyway 4.2 km S of Neal Rd, T22N R3E NW¼ of SE¼ sect. 30, on the side of Tuscan outcrops on the rim of Little Butte Cr. Canyon, foothill woodland-chaparral ecotone, 335 m, 16 Apr 1986, *Oswald 1069* (CHSC); Hwy 70 at SE entrance of Grizzly Dome Tunnel, along base of granite cliff in decomposed granite, 17 Apr 1976, *Lickey 75* (CHSC); E of Feather Falls ca. 13 km, on dry bare lava cap, yellow pine f., 1000 m, 4 Jun 1982, *Ahart 3534* (CHSC); Lumpkin Ridge, E of village of Feather Falls, T21N R7E sect. 36, in open on Lovejoy basalt, yellow pine f., 20 May 1981, *Schlising 4060* (CHSC); ca. 12.9 km NE of Feather Falls, on dry bare broken black lava, yellow pine f., 1280 m, 12 May 1987, *Ahart 5627* (CHSC). Madera Co., Canyon of Nelder Cr. ca. 16 km N of Oakhurst, slopes E of creek, T6S R21E SE¼ of SE¼ sect. 30, small domal granite outcrops in brushy yellow pine f., 9 May 1984, *Jokerst 1999* (CHSC). Nevada Co., NW of Emigrant Gap 8 km, 0.8 km N of South Yuba River, T17N R11E SW¼ sect. 2, foothill woodland, on metamorphic parent material, 1 May 1985, *Bowcutt 499* (UC); W of Lake Spaulding dam 0.8 km, along Bowman Lake Rd 2.9 km from Hwy 80, 12.8 km SE of Washington, 0.2 km W of South Yuba River, T17N R11E SW¼ sect. 2, foothill woodland, on metamorphic rock outcrop and talus 1418 m, 1 May 1985, *Bowcutt 501* (UC). Placer Co., N of Long Canyon Cr., E of Blacksmith Flat, T13N R13E NW¼ of SW¼ sect. 7, on rock talus and bedrock outcrops in openings in S facing slopes, mixed coniferous f. and chaparral, 1128 m, 19 Jun 1984, *Jokerst 2057* (CHSC). Shasta Co., 4.8 km E of Hwy 5, along Gilman Rd near Shasta Lake, 11 May 1983, *Lennon s.n.* (DAV, JEPS). Sierra Co., Lavezzola Creek Canyon, 12 km NE of Downieville, along U.S. Forest Service trail, T21N R11E SW¼ of NW¼ sect. 33, 1390 m, 5 Aug 1985, *Bowcutt 649* (UC); N of Pacific Mine ca. 0.4 km, ca. 8 km E of LaPorte, on dry bare rocky soil in yellow pine f., 28 Jul 1982, *Ahart 3690* (CHSC); on dry rocky ridge above Foote Rd, ca. 8 km S of Alleghany, yellow pine f., 1219 m, 4 Jun 1978, *Ahart 1770* (CHSC).

*Habitats.* The following habitat description is based on herbarium label data and field observations over three years. The herbarium data presented above do not include the forty specimens collected in Mariposa and Tuolumne cos. that are housed at CAS, CHSC, HSU, JEPS, and UC. However, the range of habitats and elevations for these counties is represented in the description. *Phacelia vallicola* is found on granitic, metamorphic, and volcanic rock outcrops and talus slopes in foothill woodland, yellow pine forest, mixed coniferous forest, and chaparral communities. According to Munz (UC Press, 1973), *Phacelia vallicola* also occurs in red fir forest; however, I have not seen any specimens collected from this plant community. The species' known elevational range is from 335 to 2134 m. The plant is often common but scattered where it occurs. Most known populations are on U.S. Forest Service lands. Possible threats include hydroprojects and mining. Indirect impacts could result